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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/801,950	03/08/2001	Philip G. Durr	206580	1451
23460	7590	09/15/2004		
LEYDIG VOIT & MAYER, LTD TWO PRUDENTIAL PLAZA, SUITE 4900 180 NORTH STETSON AVENUE CHICAGO, IL 60601-6780			EXAMINER KENDALL, CHUCK O	
			ART UNIT 2122	PAPER NUMBER

DATE MAILED: 09/15/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/801,950

Applicant(s)

DURR ET AL.

Examiner

Chuck Kendall

Art Unit

2122

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 26 May 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-37 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-37 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- 1) ☐ Certified copies of the priority documents have been received.
  - 2) ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

### DETAILED ACTION

1. This action is in response to the application filed 05/26/04.
2. Amendment to claims 1 – 37 has been reviewed.

### Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1 – 37 are rejected under 35 U.S.C. 103(a) as being unpatentable over Baisley et al. USPN 6,330,569 B1 (hereinafter “Baisley”) in view of Ronning et al. US 2003/0195974 A1.

Regarding claim 1, Baisley discloses a computerized system comprising a program modification database for providing substitute program segments for particular identified programs at program load time, each identified program and each substitute program segment comprising at least one computer-executable instruction, the database comprising;

a set of substitute program segments (Col.3:10 – 15, see Xml and Uml objects);

a set of program entries specifying correction information for such particular identification programs, wherein individual ones of the set of program entries comprise:

and a reference to at least one substitute program segment in the set of Substitute program segments (Col.3:10 – 15, for matching criteria see difference and target reference); and

an index including a set of identifiers, wherein each identifier corresponds to one of the set of program entries (FIG.4, see 38, GHOST OBJECT ID). Baisley doesn't explicitly disclose a program matching criteria matching atleast one existing executable program, although Baisley

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does disclose performing updates and versioning of programs by executing a repository program utilizing a data warehouse/storage or database as interpreted. Ronning discloses in an analogous art, matching executables using file identification i.e. name and dll name as well as signatures as well as disclosing performing updates using a database which houses the programs see section [0103, 0104]. Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine Baisley and Ronning because, being able to update executables would enable more dynamic updating of the program.

Regarding claim 2, the program modification database of claim 1, wherein ones of the set of identifiers comprise text strings corresponding, to at least a portion of a program name (FIG. 5A, step 55, see attributes).

Regarding claim 3, the program modification database of claim 1, further comprising a preliminary search function for comparing ones of the set of identifiers to corresponding information for a program to identify potential matching, entries in the set of program entries (FIG. 5A, for search see step 53, traversal and step 55 for match (comparing)).

Regarding claim 4, the program modification database of claim 3, wherein the corresponding information comprises at least a portion of a program name (FIG.4, see 38, GHOST OBJECT ID, also see Col. 4:20 – 25).

Regarding claim 5, the program modification database of claim 1, wherein the set of substitute program segments includes a program Interface (Col.5: 32 – 34).

Regarding claim 6, the program modification database of claim 1, wherein individual ones of the set of program criteria include a program name (FIG.4, see 38, GHOST OBJECT ID, also see Col. 4:20 – 25 for object name).

Regarding claim 7, the program modification database of claim 6, wherein the programming matching criteria includes at least one File metadata-based criterion (Col.2: 45).

Regarding claim 8, the program modification database of claim 1, wherein the set of potential set of criterion types for specifying a particular program matching criteria is extensible (Col. 1: 57 – 60, see Extensible Markup Language, XML).

Regarding claim 9, the program modification database of claim 8 wherein programming matching criterion types are specified by XML tags (Col. 1: 57 – 60, XML).

Regarding claim 10, the program modification database of claim 1, further comprising a library section one or more program files, including one or more substitute program segments, to be loaded into a process space by a program loader when the operating system loads the computer program (FIG. 2, for Library section, see 21, for REPOSITORY).

Regarding claim 11, the program modification database of claim 1, further comprising one or more explicit exclude instructions having a reference to a calling module for which program Substitution is not implemented (Col. 7: 15 – 20, for exclude see “reserved”).

Regarding claim 12, the program modification database of claim 1, further comprising one or more explicit include instructions having a reference to a calling module for which a more general explicit exclude instruction is overridden thereby enabling program segment Substitution for the particular calling module (Col. 7:23 – 26, for explicit include, see “if not already reserved”).

Regarding claim 13, the program modification on database of claim 1, further comprising a search function for matching criteria of the individual ones of the set of program entries to a program to identify a match (FIG. 5A, steps 52 – 55, see match).

Regarding claim 14, the program modification database of claim 13, wherein the search function comprises procedures for executing a multi-tiered executable program matching scheme to locate a matching entry within the set of program entries for a particular program, the procedures comprising:

a first procedure executing a first search on an index having identifying information for each one of the set of program entries to identify a set of potential matching entries (FIG. 5A, for search see traversal and retrieve and match 51 – 55); and

a second procedure executing a second search on at least a portion of the set of potential match, entries to identify a program entry matching the particular program based upon the program matching criteria for the program entry (FIG. 5C, step 67, for second search).

Regarding claim 15, the program modification database of claim 1, wherein the set of substitute program segments is stored in a read-only memory (Col. 4: 25 – 35, see computers memory, object and transiently).

Regarding claim 16 the program modification database of claim 1, wherein the set of program entries is stored in a read-only memory (Col. 4: 25 – 35, see computers memory, object and transiently).

Regarding claim 17, the program modification database of claim 1, wherein the set of substitute program segments include substitute executable program interfaces (FIG. 2, see 20).

Regarding claim 18, the program modification database of claim 1, wherein the set of substitute program segments include program patches (Col. 3: 15 – 20, for patch see updated).

Regarding claim 19, the program modification database of claim 1, wherein the set of substitute program segments are stored in a common memory location referenced by differing ones of the set of program entries (FIG. 1, see 13).

Regarding claim 20, Baisley discloses a method for providing modification segments for a particular executable program at load time in a computer system including a program modification database having a set of program entries and wherein each program entry includes a program matching criteria and a reference to at least one substitute program segment, and the method comprising the steps of:

multi-tiered matching identification information for the particular program to a program matching criteria for an entry within the set of program entries,(FIG. 5A, for matching see 55) the multi-tiered matching step comprising the sub-steps of:

first executing a first search on an index having identifying information for each one of the set of program entries to identify a first set of potential matching entries(FIG. 5A, for search see traversal and retrieve and match 51 – 55); and

second executing, a second search on at least a portion of the first set of potential matching entries to identify a program entry matching the particular program based upon the program matching criteria for the program entry (FIG. 5C, step 67, for second search);

accessing within the entry, in response to the matching step, a sub-field identifying substitute program segments for the particular program (FIG. 5A, see attributes for sub-field); and

memory location references for reading the identified Substitute program segments based upon the accessing step (FIG. 5A, see 59 for references). Baisley doesn't explicitly disclose wherein each executable program and each substitute program segment comprises at least one

computer-executable instruction, although Baisley does disclose performing updates and versioning of programs by executing a repository program utilizing a data warehouse/storage or database as interpreted. Ronning discloses in an analogous art, matching executables using file identification i.e. name and dll name as well as signatures as well as disclosing performing updates using a database which houses the programs see section [0103, 0104]. Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine Baisley and Ronning because, being able to update executables would enable more dynamic updating of the program.

Regarding claim 21, the method of claim 20 wherein the identifying information comprises a limited number of characters corresponding to names of programs for which entries are present in the program modification database (Col. 7: 35 – 37, see list).

Regarding claim 22, the method of claim 21, further comprising the step of comparing a full name of the particular program to an executable program name provided for each of the first set of potential matching entries comparison to render a second set of potential matching entries (FIG. 5B).

Regarding claim 23, the method of claim 22, wherein the at least a portion of the first set of potential matching entries corresponds to the second set of potential matching entries (FIG. 5C, step 67, for second search).

Regarding claim 24, the method of claim 20, wherein the index is stored as a packed data structure (Col. 5:65).

Regarding claim 25, the method of claim 20, wherein the program matching criteria includes comparing file metadata (Col.2: 45).

Regarding claim 26, the method of claim 20, wherein types of matching information for the program matching criteria are designated by XML tags (Col. 1: 57 – 60, XML).

Regarding claim 27, the method of claim 20, wherein the set of potential types of matching information for the program matching criteria is extensible (Col. 1: 57 – 60, See Extensible Markup Language).

Regarding claim 28, the computer readable medium version of claim 20, see rationale as previously discussed above.

Regarding claim 29, the computer readable medium version of claim 21, see rationale as previously discussed above.

Regarding claim 30, the computer readable medium version of claim 22, see rationale as previously discussed above.

Regarding claim 31, the computer readable medium version of claim 23, see rationale as previously discussed above.

Regarding claim 32, the computer readable medium version of claim 24, see rationale as previously discussed above.

Regarding claim 33, the computer readable medium version of claim 25, see rationale as previously discussed above.

Regarding claim 34, the computer readable medium version of claim 26, see rationale as previously discussed above.

Regarding claim 35, the computer readable medium version of claim 27, see rationale as previously discussed above.

Regarding claim 36, the apparatus version of claim 1, see rationale as previously discussed above.

Regarding claim 37, the apparatus version of claim 20, see rationale as previously discussed above.

### ***Response to Arguments***

5. Applicant's arguments with respect to claims 1-37 have been considered but are moot in view of the new ground(s) of rejection.

### ***Conclusion***

6. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).



A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chuck Kendall whose telephone number is 703-3086608. The examiner can normally be reached on 10:00 am - 6:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tuan Dam can be reached on 703-3054552. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

CK.

  
WEI Y. ZHEN  
PRIMARY EXAMINER